

Interferon Alpha intact 5% impurity on Jupiter 3u C18 and Jupiter 5u C4

Column: Jupiter® 3 µm C18 300 Å, LC Column 150 x 2 mm, Ea

Dimensions: 150 x 2 mm ID

Order No: 00F-4263-B0

Elution Type: Gradient

Eluent A: 0.1% TFA and 2% Acetonitrile in Water

Eluent B: 0.085% TFA, 90% Acetonitrile in Water

Gradient Profile:	Step No.	Time (min)	Pct A	Pct B
	1	0	80	20
	2	10	20	80
	3	15	10	90

Flow Rate: 0.3 mL/min

Col. Temp.: 25 °C

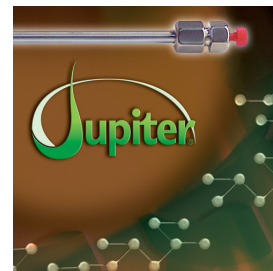
Detection: UV-Vis Abs.-Diode Array (PDA) @ 220 nm (25 °C)

Analyst Note: Application Focus: To demonstrate Jupiter 300 utility for separating folded from unfolded biogenic proteins

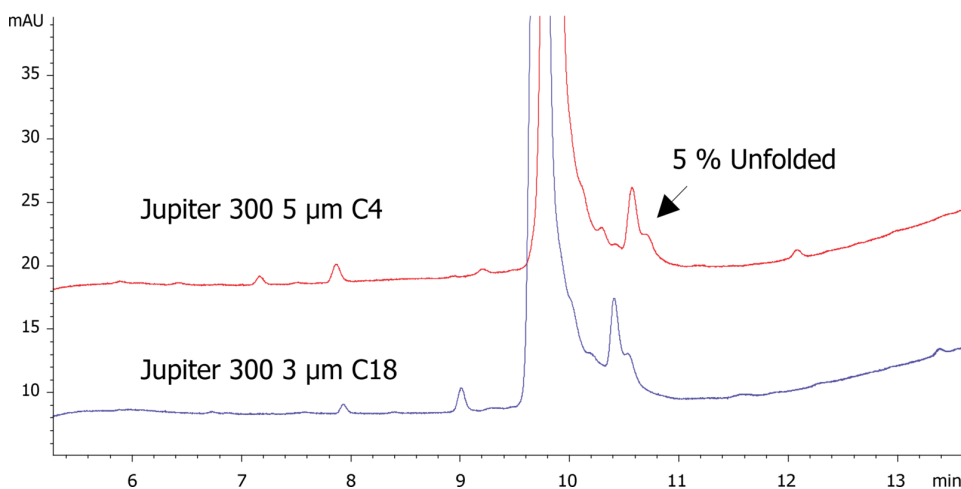
Unlike other separation techniques, reversed phase can often visualize differences between intact and unfolded/ mis-folded protein states.

Especially with E.Coli produced recombinant proteins, refolding analysis is often required as part of both manufacturing process analysis technology. In App ID# 18073 5% of unfolded interferon was added to the intact protein. As one can see from the overlaid chromatograms, both columns could easily detect unfolded impurities lower than 5% with good, rapid resolution from the intact protein in fewer than 15 minutes. This application

App ID 18073



Products used in this application:



ANALYTES:

- 1 Intact & 5% impurity

